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10/565,080	10/02/2006	Thomas Huber	59482.21860	7169

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EXAMINER	
BROOKMAN, STEPHEN A	
ART UNIT	PAPER NUMBER
3644	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/565,080	HUBER, THOMAS	
	Examiner	Art Unit	
	Stephen Brookman	3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 September 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 January 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/18/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. The examiner has withdrawn the restriction requirement specified in the Office Action of October 13, 2008. Applicant's election with traverse of Group 1, Claims 1-20 in the reply filed on September 8, 2008 is acknowledged, but the examiner has rejoined Group 2, Claims 21-23 and examined all claims.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, all of the following bulleted entities must be shown or the features cancelled from the claims.

- the guide means comprising guide rails located along at least one of side walls and a ceiling defining said cargo compartment as claimed in Claim 4 (specifically, the guide rails are shown only along the floor/lower level of the cargo compartment)
- the conducting device comprising a branch adapted for connection to a prespecified place on the functional unit as claimed in Claim 10
- the drainage device from the cargo compartment into a floor module as claimed in Claim 14
- the insulating devices of Claims 15 and 16
- the floor modules comprising at least one of a partition and a fixation device for a partition as claimed in Claim 17
- the lining element or mounting devices for said elements as claimed in Claim 18

- the section of a partition mounted on a the functional unit as claimed in Claim 20

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure is objected to because it is not clear which abstract that has been submitted is the official abstract. There are two versions of the abstract

on record, one from the WIPO publication, and one from the amended version of the originally filed specification. The correct abstract must be submitted alone on an individual page for clarity. The examiner will examine the abstract as modified by page 3 of the preliminary amendment filed January 18, 2006. In this amended abstract, it appears that the word "with" should be deleted from line 5 and the word "or" should be added between "tank" and "an" in line 7. Further, the term “EE rack” is unclear and is to be defined or omitted. Finally, the abstract is objected to because it contains the legal term “means” in line 1 of Page 4. Correction is required. See MPEP § 608.01(b).

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title is overly broad and does not specify any of the apparent main facets of the invention.

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

6. The disclosure is objected to because of the following informalities: the term “EE racks,” used throughout the specification, is unclear.

Appropriate correction is required.

Claim Objections

7. Claim 19 is objected to because of the following informalities: in line 6 of page 5 and line 1 of page 6, it appears that “to” is missing from between "over said cargo-

compartment floor" and "a destination in the cargo compartment." Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 6, 9, 18, and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, Claim 6 is rendered indefinite in line 2, wherein the language of line 2 is not clear. The language “said functional unit is mounted on said at least one section a partition” is unclear. The examiner has examined this claim on its merits as best understood with respect to the specification and related claims.

With regard to Claims 9 and 22, it is unclear what conducting devices are to be considered the limitations of the claim, as “other conducting devices” could include devices not properly disclosed within the specification and drawings.

With regard to Claim 18, the language “and a or” renders the claim indefinite. The examiner has assumed that "a" is an unintended typographical error, but the language "and or" remains, leading to lack of clarity in the claim. It is not clear if the floor module must contain a lining element and a mounting device or either of

these only in the alternative. Furthermore, in line 2, it is not clear which elements are “said elements,” as there are several uses of the limitation "elements" in preceding claims.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1, 3-8, and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by McDonough et al. (U.S. Patent 3,381,921).

With regard to Claims 1, 8, and 19, McDonough et al. teach an aircraft and a method of manufacturing an aircraft defining a cargo compartment (Figure 1, inside fuselage 10) and comprising a cargo-compartment floor (14) comprising floor elements, supporting beams supporting and connected to said cargo-compartment floor elements and connected to a skin of the aircraft forming prefabricated floor modules (inherent in all airplanes, supporting beams support the floor and are connected to aircraft skin, the modules being fabricated prior to installation); at least one functional unit (i.e., passenger seats 34 in Figure 1 or cargo 46 in Figure 2) and a pallet (30 or 44d) supporting said functional unit (Figures 1 and 2), said pallet being adapted for the transportation of said

functional unit (i.e., loading) into said cargo compartment after being mounted on the pallet outside of the aircraft (Figures 1 and 2) and being provided with a fixation means that provides a stable connection to said cargo-compartment floor (i.e., latches 42 in Figure 1, column 4, lines 3-11, or cargo pallet locks 28, Figure 2, column 4, lines 26-31) after being moved over the cargo-compartment floor to a destination in the cargo compartment.

With regard to Claims 3 and 4, McDonough et al. further teach the cargo compartment comprising guide means comprising guide rails located along the side walls of the cargo compartment and adapted to guide the functional unit (i.e., rail assemblies 22 along wall of fuselage 10).

With regard to Claims 5-7, at least one section of a partition is mounted on the pallet (i.e., leg 38 of a chair in Figure 1 can be considered a section of a partition mounted on the pallet 30). The functional unit (i.e., seat 34) is mounted on the section of the partition. The partition comprises sealing means (i.e., it is sealed/joined by mounting pieces as seen in Figure 1) to the parts of the aircraft that define the cargo compartment (i.e., the pallet partially defines the cargo compartment).

With regard to Claim 20, at least sections of partitions are mounted on the pallets while they are outside the aircraft prior to installation therein (i.e., the legs of the seats in McDonough et al. are sections of partitions, mounted on the pallets prior to installation into the aircraft).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDonough et al. (U.S. Patent 3,381,921) in view of Prochaska (U.S. Patent 6,659,402).

McDonough et al. teach the aircraft of Claim 1 as rejected above but do not expressly disclose at least one of the pallet and cargo-compartment floor comprising connecting devices adapted to join a connection lead of the functional unit to a corresponding connection lead of the aircraft. However, Prochaska teaches a modular aircraft seat system wherein the pallet or modular cargo-compartment floor (i.e., base panel 26) features a connecting device (i.e., electrical connector 56, air connector 54) for the purpose of connecting the

pallets/floor modules together and capable of connecting to corresponding connection leads of the aircraft for ease of installation and without a need for altering, rewiring, or rerouting aircraft support devices (column 4, lines 5-8, 55-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to include connecting devices capable of joining a connection lead of the functional unit to a corresponding connection lead, as taught by Prochaska, in the invention of McDonough et al., for the purpose of connecting the pallets/floor modules together and for predictable ease of installation and without the need for alteration or rewiring.

15. Claim 8 is alternatively rejected and Claims 9-18, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonough et al. (U.S. Patent 3,381,921) in view of Prochaska (U.S. Patent 6,659,402).

With regard to Claim 8, McDonough et al. do not expressly disclose discrete floor elements connected to the supporting beams to form prefabricated floor modules. However, Prochaska teaches a modular aircraft seat system in which the seats (24) are mounted to floor elements (i.e., base panel 26) that are connected to the supporting beams of the aircraft to form prefabricated floor modules for the purpose of creating a modular aircraft interior for ease of installation and reconfiguration without major alterations to aircraft wiring or support devices. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of McDonough

et al. such that the pallets (30 of McDonough et al.) define additional floor modules with connecting elements, as taught by Prochaska, and connected to the supporting beams via the under-floor of McDonough et al. (14) for the predictable purpose of creating a modular aircraft interior without major complications or alterations, as furthermore taught by Prochaska.

With regard to Claims 9 and 22, sections of conducting devices comprising electrical leads (56) are provided in the floor modules of Prochaska (Figure 2) in such a way that those in one floor module connect with others of the same kind in adjacent floor modules to form overall conducting systems on installation in the aircraft (i.e., as seen in Figures 1 and 8 and described in column 4, lines 43-61).

With regard to Claims 10 and 23, the conducting device of Prochaska (56) comprises a branch adapted for connection to a prespecified place on the floor element (26) and the functional unit (seat 24, branch connections seen in Figure 7, wherein the lead branches through the floor element 26 and into the seat harness 100).

With regard to Claims 11-13 and 21, McDonough et al. as modified by Prochaska teaches the aircraft according to Claim 8 as rejected above wherein the cargo-compartment floor comprises a plurality of prefabricated floor modules (inherently, being fabricated prior to installation) and wherein a plurality of

assembly elements are provided to connect each of the floor modules to adjacent floor modules during or after installation of the aircraft (i.e., contours 34 and 36 of Prochaska are assembly elements, linking the prefabricated floor modules to adjacent floor modules during installation). The assembly elements of the floor elements (34 and 36 of Prochaska) are sealing devices adapted to seal off a space above the floor elements from a space defined below them (i.e., as in column 4, lines 41-42, wherein there is no gap between the base panels/floor elements 26, inherently sealing off a space above the floor elements from the space below). Having no gap between the elements forms a leakproof connection between them.

With regard to Claim 14, Prochaska teaches the air connector (54 of Prochaska) capable of performing the duty of being a drainage device and capable of carrying a liquid out of the cargo compartment and to transfer the liquid into a corresponding drainage device of an adjacent floor module (i.e., as the base panels 26 connect together to interconnect the connectors 54 together, which function as tubular plumbing systems capable of performing the claimed function).

With regard to Claims 15-16, the floor modules as taught by McDonough et al. as modified by Prochaska inherently feature insulating devices, as any of the provided elements function as insulators to some degree, including any insulation

on the electrical wiring or the modules themselves, functioning to insulate a lower portion of the aircraft, either from heat or from electrical conductivity. The insulating devices/electrical insulators/floor modules acting as insulators are attached in the region of the supporting beams near to the skin of the aircraft.

With regard to Claim 17, the floor modules comprise a partition (i.e., the legs of the seats in either McDonough et al. or Prochaska function as partitions).

With regard to Claim 18, the floor modules as taught by McDonough et al. as modified by Prochaska comprise a mounting device capable of holding a lining element (i.e., pallets/floor modules of McDonough et al. 44 have a mounting device holding a liner for cargo, as seen in Figure 2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Brookman whose telephone number is (571) 270-5513. The examiner can normally be reached on Monday through Thursday 10:00 AM EST to 4:00 PM EST, away alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen can be reached on (571) 272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. B./
Examiner, Art Unit 3644

/Rob Swiatek/
Primary Examiner, Art Unit 3643